

CLAIMS

1. Machine for the manufacture of sheets ready prepared for immediate binding, having a strip of adhesive substance along one of its edges and a strip of silicone material positioned in a releasable manner on the strip of adhesive substance, the sheets consisting of paper material in the form of single sheets or in strip form such as continuous stationery provided with transverse lines with predetermined weakening, characterized in that it comprises along at least one production line thereof at least one applicator for applying a non-adhesive band onto the paper material advancing in a continuous manner along a feeding plane, said at least one applicator comprising:
- a rotatable band-holder drum in a position situated above the paper material which advances in a continuous manner;
  - means which define a travel path for movement towards the continuously advancing paper material, consisting of rollers and band-guiding pulleys;
  - a dispenser of liquid adhesive substance, supplied from a tank equipped with a pumping device, for application of the adhesive substance in the form of a metered jet onto the side of the band which is to be brought into contact with the paper material, over a desired length;
  - a pressure unit including, symmetrically with respect to the feeding plane of the paper material, a lower drive roller situated underneath the paper material and a pressure roller located above in a projecting manner in contact with the lower drive roller, with the arrangement in between of the band bearing the adhesive substance and the paper material, so as to cause the band to adhere to the advancing paper material.
2. Machine according to Claim 1, characterized in that the applicator for applying the non-adhesive band onto the paper material also comprises a band cutter which can be activated at the terminal end of the advancing paper material.

3. Machine according to Claim 1, characterized in that it also comprises a pair of upper and lower drive rollers able to drive along its feeding plane the paper material in strip form supplied from a reel positioned inside a feeder.

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4. Machine according to Claim 3, characterized in that it also comprises an encoder associated with a wheel rotating in synchronism with the drive rollers, said wheel having a circumference with a length equal to the desired height of the sheets and a contact cutter for performing cutting into sheets, situated above the zone where the strip of paper material passes and actuated by means of the encoder.

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5. Machine according to Claim 4, characterized in that it also comprises two conveyor belts, one upper and one lower, which are arranged with mirror-symmetry with respect to the feeding plane of the paper material in sheet form downstream of the contact cutter and the drive rollers, which plane is coplanar with the horizontal feeding plane of the paper in strip form, the conveyor belts having a transverse width smaller than that of the sheets conveyed and a speed greater than the peripheral speed of the drive rollers.

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6. Machine according to Claim 1, characterized in that it comprises so-called vacuum belts for feeding the paper material in the form of sheets.

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7. Machine according to any one of the preceding claims, characterized in that it also comprises a scoring wheel for the paper material.

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8. Machine according to any one of the preceding claims, characterized in that it also comprises a photocell for controlling feeding of the paper material.

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9. Machine according to any one of the preceding claims, characterized in that it also comprises an electronic control unit and a control panel

for entering the desired parameters.

10. Machine according to any one of the preceding claims,  
characterized in that it also comprises a device for collecting the  
5 finished product.

11. Machine according to any one of Claims 1 to 10, characterized in  
that it also comprises a single-stage device for collecting the finished  
product.

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12. Machine according to any one of the preceding claims,  
characterized in that also comprises a multiple-stage device for  
collecting the finished product.

15 13. Machine according to any one of the preceding claims,  
characterized in that it comprises, along a production line, two or more  
tracks with at least one device for collecting the finished product at the  
end of each track.

20 14. Machine according to any one of the preceding claims,  
characterized in that said non-adhesive band consists of silicone  
material.

25 15. Machine according to any one of the preceding claims,  
characterized in that said non-adhesive band consists of polyester.

16. Machine for the manufacture of sheets ready prepared for  
immediate binding according to any one of the preceding claims,  
substantially as described and illustrated with reference to the  
30 accompanying drawings.